

Work Order ID 151156

151156

Page 1

Monday, September 12, 2016 11:35:12 AM

Item ID: D5317-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Dowel Pin
 Start Date: 10/5/2016 Start Qty: 30.00 ***30*** Cust Item ID:
 Required Date: 10/5/2016 Req'd Qty: 30.00 ***30*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: **SEP 12 2016** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D5317	A

100 0.00 ***100*** **DAS 13 9-89**
 Purchasing **30** **SEP 12 2016**
 Purchasing Memo Issue P/O: **33625**
 Possible supplier: MCMaster Carr
 Supplier P/N: 97395A451
 C of C is required.

110 0.00 ***110***
 Packaging Receive & Inspect for Damage & Mat'l Certs
 Packaging Memo **30x Sp16-9-15**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 151156***151156***

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Item ID: D5317-1 Accept ***N1900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Dowel Pin
Start Date: 10/5/2016 Start Qty: 30.00 ***30*** Cust Item ID:
Required Date: 10/5/2016 Req'd Qty: 30.00 ***30*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00							
120						30			DAS 38 9-89
QC	Memo	0.00							
Quality Control									SEP 19 2016
130	Identify as per dwg & Stock Location WAC001	0.00							
130						30			DAS 6 9-89
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									DAS 21 9-89
QC	Memo	0.00							SEP 19 2016
Quality Control									

DAS
21
9-89 SEP 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Monday, September 12, 2016 11:35:18 AM

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151 156

D5317-1

Required Qty: 30.00

[illegible]

30

97395A451

Dowel Pin

DQA: _____ Date: _____



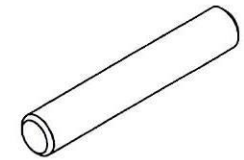
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

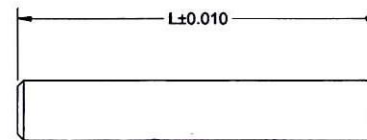
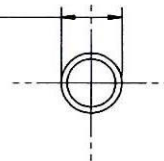
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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																								OTHER :																																							

SPECIFICATION CONTROL DRAWING



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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 151156 MJS
16-09-12

ITEM	DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	MATERIAL	LENGTH (L) (IN)	DIAMETER (D) (IN)	WEIGHT (LB)
1	D5317-1	DOWEL PIN	MCMaster CARR	97395A451	316 SS	0.750	0.125	0.003

D5317-X DOWEL PIN

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: SEE TABLE

RELEASED
2016-04-18
ECW/b-557

APPROVED

A	NEW ISSUE	AK	15.10.05
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	CC	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5317	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DOWEL PIN	NTS
DATE	15.10.05	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33625

Purchase Order Date 9/12/2016

PO Print Date 9/12/2016

Page Number 1 of 3

Order From :
MCMASTER-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

SEP 12 2016

E-MAILED

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	330 995 5500	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 10
Ship To Phone		Currency	USD
Ship Via:	Purolator ground ppd	FOB	FCA - (Free Carrier)
Ship Acct:			

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	97395A451 AS PER DWG D 5317 REV. A B151156	Dowel Pin ✓	9/14/2016 Yes 9/14/2016	FN	30.00 Each	\$1.23	\$36.78
Line Total:							\$36.78
2	63215K52 AS PER DWG D3965 REV. B B151155	Bearing Spherical	9/14/2016 Yes 9/14/2016		10.00 Each	\$15.62	\$156.20
Line Total:							\$156.20
3	71400-11	5311T17 SIZE: 9 RUBBER BOOT	9/14/2016 Yes 9/14/2016		1.00 Each	\$22.38	\$22.38

Note:

9/12/2016



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: Andy
Carl

Purchase Order
PO33625

Order Placed By
Chantal Lavoie

McMaster-Carr Number
8413236-02

Page 1 of 1

09/12/2016

Line	Product	Ordered	Shipped
1	97395A451 Corrosion Resistant Dowel Pin, Type 316 Stainless Steel, 1/8" Diameter, 3/4" Length, Packs of 10 <i>SP16-9-15.</i>	3 Packs	3
2	63215K52 Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 1/4" ID, 21/32" OD, 11/32" Ball Thick	10 Each	4
3	5311T17 PVC Work Boot, Safety Toe, 16" Height, Black, Men's Size 9 Your Part Number: 71400-11	1 Pair	1
4	5311T17 PVC Work Boot, Safety Toe, 16" Height, Black, Men's Size 11 Your Part Number: 71400-11	1 Pair	1
5	7187T29 Hand Brush, for Wet Use with Acids & Alkalies, 0.014" Bristle Diameter	1 Each	1
6	5835A15 3/8" Square Drive High-Torque Ratchet Wrench, Push-Button Release, 7-5/8" L Overall, Chrome Finish	1 Each	1

Shipped separately from our Chicago warehouse on 09/12

2	63215K52 Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 1/4" ID, 21/32" OD, 11/32" Ball Thick	10 Each	6
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